

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-4 (Cancelled)

Claim 5. (Currently Amended) A process for filtering a feed water comprising the steps of:

- (a) providing a tank containing modules of filtering membranes;
- (b) introducing a feed water to the tank to keep the modules immersed in water in the tank;
- (c) withdrawing a filtered permeate from the modules;
- (d) withdrawing a retentate from the tank;
- (e) introducing a first gas into the water in the tank in bubbles which rise past the membranes to inhibit fouling of the membranes; and
- (f) collecting a second gas consisting of gases contained in the bubbles after they have risen past the membranes;
- (g) collecting air in addition to any air in the second gas from the atmosphere;
- (h) mixing the collected air with the second gas; and,
- (i) exhausting a portion of the second gas,

wherein the first gas consists essentially of a mixture of the second gas and air.

Claim 6. (Previously Presented) The process of claim 5 wherein the first gas includes carbon dioxide in a concentration greater than in air.

Claim 7. (Previously Presented) The process of claim 6 wherein the second gas is 80% or more of the mixture.

Claim 8. (Original) The process or claim 7 wherein the feed water in the tank has scaling tendencies.

Claim 9. (Currently Amended) The process of claim 6 wherein the first gas is provided introduced in step (e) of claim 1 at a superficial velocity of at least 0.01 m/s and has a concentration of carbon dioxide sufficient to maintain a pH of 8.0 or less in the water in the tank when and the feed water introduced in step 1(b) of claim 1 has a Langlier Scaling Index of greater than 0.5 before being introduced into the tank.

Claim 10. (Original) The process of claim 7 further comprising the step of adding coagulants to the feed water in the tank.

Claim 11. (Cancelled)

Claim 12. (Previously Presented) The process of claim 5, wherein some of the gases contained in the bubbles after they have risen past the membranes is collected and returned to the tank in step (e) and some of the gases contained in the bubbles after they have risen past the membranes are vented to the atmosphere.

Claim 13. (Previously Presented) The process of claim 5 further comprising the steps of drawing a flow of air from the atmosphere into a vacuum induced flow of the second gas to create the first gas.

Claim 14. (New) A process for filtering a feed water having scaling tendencies comprising,

(a) providing a tank containing modules of filtering membranes;

(b) introducing the feed water into the tank in a condition in which the feed water has a Langlier Scaling Index of greater than 0.5;

(c) withdrawing a filtered permeate from the modules;
(d) withdrawing a retentate from the tank;
(e) introducing a gas into the water in the tank in bubbles which rise past the membranes to inhibit fouling of the membranes and then burst at the surface of the water in the tank at a superficial velocity of at least 0.01 m/s; and,

(f) increasing the concentration of carbon dioxide in the gas by mixing carbon dioxide collected from the bursting bubbles into the gas.

Claim 15. (New) The process of claim 14 wherein the concentration of carbon dioxide in the gas is increased to an extent sufficient to maintain a pH of 8.0 or less in the water in the tank.

Claim 16. (New) The process of claim 14 wherein the water in the tank has a free surface in communication with the atmosphere.